Federation Management
Technical Exchange

Background - Technical Exchanges

- **HLA evolution is based on feedback from users**

- **Important to establish a mechanism for capturing user experiences in areas of specific interest**

  - **Technical exchanges are a mechanism to identify and explore potential issues**

  - **Share information on plans and results of issue investigations**

  - **Results are reported back to the AMG**

- **Technical exchanges was held since the last AMG**

  - **Federation Management**

  - **Data Distribution Management**

Federation Management Technical Exchange

- **Held on 30 January, at DMSO**

- **~20 participants**

- **Included representatives of programs involved in training, testing, and acquisition applications of HLA**

- **Focus of this exchange was on the Management Object Model**

- **Presentations from**
  - **Implementation of MOM in RTI F.0 - Richard Weatherly**
  - **Use of MOM in STOW - Jim Calvin**
  - **Federation Monitor experience and Plans - Ron Sell**

- **Presentations are posted on the DMSO homepage**

MOM Background

- **MOM document provides a description of management data to be provided by the RTI to support federation management and operations**

  - Adopts the approach of using HLA components (OMT, IF) to support exchange of management data

  - Allows for extension of management data in a particular federation to incorporate additional data to be provided by the federates

- **Developed as the results of a small task team looking at this issue based on experience with management and operations of various distributed simulation systems and the experience of the protofederations**

  - DI/IITSEC, SIMNET, ALSP, JPSD, STOW

- **RTI F.0 implements a subset of the items as a basis for assessing the technical feasibility, usability of the approach**

  - STOW and the Federation Monitor Tools are two initial users

MOM Status and Plans

- **MOM Document Version 0.2 is on the homepage**
- **RTI F.0 with selected MOM capabilities (described in RTI F.0 Users documentation) is available for use and feedback**
- **Interested in identifying added users of MOM in RTI F.0**
  - **Federate Interface testing system is another example**
  - **Solicit input for AMG members and others, request on HLA_online**
- **Feedback on document is welcome at anytime**
- **Future federation management technical exchange will focus on experience with MOM**

MOM Direction

- **Ideally MOM would be become a required capability of any RTI**

    - **Tools developed using MOM would be independent of the RTI implementation**

- **Decision to include MOM as an RTI requirement should be based on sufficient experience with its use and a determination of**

    - **what data should be required (only that available uniquely from the RTI, data that the RTI can most efficiently provide, any data the RTI could provide...)**

    - **form that data would be provided (via MOM approach or added IFs..)**

    - **assessment of impact on RTI implementation (should not add costs to those who do not use it)**

- **Propose we consider this as an issue to be addressed by the AMG, focus on August or February checkpoint**

Plans For Other Federation Discussion

- **Two other potential issues have been raised in the federation management technical discussions**

  - **Support for combined federations (for security and other reasons)**

  - **Multiple connections to the RTI from one federate (ala CCTT in PPF)**

- **At the first technical exchange, some examples of were presented of circumstances where these applications would be found (SBD, CCTT/WARSIM, Security Architecture)**

  - **Efforts are underway to develop/assess such applications using the current HLA capabilities**

- **Plan is to revisit these issues once these is some more actual experience**

  - **Because MOM is likely to be implicated in these more complex HLA application, MOM discussions were seen as an appropriate added element to have out for discussion**

- **Next Federation Management technical exchange will revisit these issues; target date is March 17th**